(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



| [13]| | 13]| [13]| | 14]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| | 15]| |

(43) International Publication Date 18 September 2003 (18.09.2003)

PCT

(10) International Publication Number WO 03/076717 A1

(51) International Patent Classification⁷: 19/38, 17/63

D21H 19/00.

- (21) International Application Number: PCT/FI03/00179
- (22) International Filing Date: 11 March 2003 (11.03.2003)
- (25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 20020479

14 March 2002 (14.03.2002) FI

- (71) Applicant (for all designated States except US): METSO PAPER, INC. [FI/FI]; Fabianinkatu 9 A, FIN-00130 Helsinki (FI).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): MAIJALA, Juha [FI/FI]; Messukylänkatu 37 B 12, FIN-33700 Tampere (FI). GRÖN, Johan [FI/FI]; Vesiniityntie 6 A, FIN-02360 Espoo (FI). PUTKISTO, Kaisa [FI/FI]; Poukamankatu 7 C 8, FIN-33720 Tampere (FI). NISSINEN, Vilho [FI/FI]; Onkimaantie 195, FIN-04660 Numminen (FI). RAUTIAINEN, Pentti [FI/FI]; Kauhavankuja 4, FIN-04430 Järvenpää (FI).

(74) Agent: TAMPEREEN PATENTTITOIMISTO OY; Hermiankatu 12 B, FIN-33720 Tampere (FI).

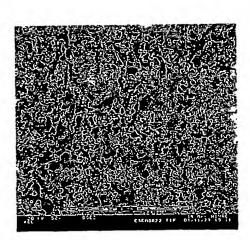
- (81) Designated States (national): AE, AG, AL, AM, AT (utility model), AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ (utility model), CZ, DE (utility model), DE, DK (utility model), DK, DM, DZ, EC, EE (utility model), EB, ES, FI (utility model), FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK (utility model), SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: A METHOD FOR COATING A SURFACE OF A CONFINUOUS WEB WITH A COATING POWDER



(57) Abstract: The present invention relates to a method for coating a surface of a continuous web which fibrous portion consist of paper-making fibres, with a coating powder. The method comprises the steps of allowing the web to move between electrodes, which are in different potentials, applying the coating powder comprising inorganic material and polymeric binder material on the surface of the web by utilizing the difference in the electric potential, and finishing the coated surface of the web. The coating powder comprises 10.1 - 99.5 wt.-% of inorganic material. The present invention also relates to a dry surface treated sheet material.